Universal Service

"Universal service" is a cornerstone of telecommunications policy. It is the idea that telecommunications service is so important to participation in society that everyone ought to have access to it, at least to a certain degree. This also squares well with an important truth of telecommunications networks—the more people who are connected, the more valuable the network. A network of one is useless. A communications network where nearly everyone can be assumed to participate is exponentially more valuable than one that only reaches a half of the population, or a third, or a quarter.

Universal service policy is only theoretical if it does not address serious barriers to its achievement—barriers that include economic hardship, disability, geography and density. Service must not only be available but also within the financial reach of users. Universal service can be a challenge to sustain. Underlying the policy of universal telephone service is a web of support payments, mandates, and judiciously monitored competition.

Universal service is also a term of art with very specific meaning in certain legal and regulatory contexts. That is not the only way it is used in this section of the plan. Instead, this section looks forward to the future and addresses the concept and goals of universal service. Universal service has inherited a legacy of support mechanisms and policies that have produced important results in telephone service, at a cost. The ongoing transition from the system of regulated monopoly service providers to competitive markets presents special challenges to universal service. Responsibility broadens from a single dominant provider to the industry as a whole. Technological advances and the resulting changes in the costs for providing many services are forging a new communications environment. Distinctions between categories of services and providers are disappearing as a result of convergence. As services lose their boundaries, distinctions between services become tenuous, requiring universal service to redefine itself accordingly by adapting its funding mechanisms and target services in an appropriate and effective manner.

"It is the purpose of this section…to…support the universal availability of appropriate infrastructure and affordable services for transmitting voice and high-speed data..."–30 V.S.A. § 202c(b).

TELEPHONE AND BROADBAND

Affordable basic telephone service has been a long-term goal of state telecommunications policy, and this goal has largely been achieved. Vermont has one of the highest levels of telephone penetration in the nation (97.2% of households).[1] Universal service policies have contributed strongly to this objective. In particular, Vermont has funded its Lifeline program to obtain near-maximum federal match. (See Table 5.1.) Federal dollars in support of Lifeline have increased faster than the increase in Lifeline customers (see Table 5.2), but the portion of the monthly local bill set by federal regulators has also increased significantly in recent years. Vermont's universal service fund also supports a successful statewide E 9-1-1 service as well as successful Telecommunications Relay and Telecommunications Equipment programs for the deaf, hard-of-hearing, and speech-impaired. A variety of mechanisms that have supported universal telephone

Table 5.1:
Northeast state federal and state lifeline support

Average monthly support per qualifying phone line as of December 2002

State or Jurisdiction	Basic Federal Support	Additional State Support	Federal Match	Total Federal and State Support
Connecticut	$7.53	$1.16	$0.58	$9.27
Maine	$7.75	$3.48	$1.74	$12.98
Massachusetts	$7.75	$6.00	$1.75	$15.50
New Hampshire	$7.75	$-	$-	$7.75
New York	$7.67	$3.19	$1.60	$12.46
Rhode Island	$7.75	$3.40	$1.70	$12.85
Vermont	$7.75	$3.48	$1.74	$12.97

Source: FCC, Trends in Telephone Service, August 2003.

service in Vermont are in flux. These include the Federal Universal Service Fund, the Vermont Universal Service Fund, and rate-setting policies that tended to lower the price of dial tone, especially in rural and high-cost areas, while increasing the price of other services. (See "Traditional Tools for Keeping Local Dial Tone Rates Low," below.) New technology and business models put pressure on pre-existing notions of how and what to support for universal service.

Traditional Tools for Keeping Local Dial Tone Rates Low

States and the Federal government have traditionally used a variety of tools to keep local telephone service rates low, to promote universal service. Some of these tools are under pressure from competition and technological changes.

- High-cost support: The federal government imposes a charge on telecommunications carriers based on their revenues. (Carriers often pass this on via a charge on customers' bills.) A portion of this money is given to carriers based on their costs (or a model of their costs) to provide service to high-cost areas. This support allows those carriers to reduce local exchange rates.
- Lifeline: This program provides support to carriers for their telephone customers who apply and qualify under income eligibility requirements. Lifeline customers receive a lower monthly telephone rate.
- Access charges: Additional support for the cost of local telephone service is provided through the system of per-minute access charges that long distance companies pay local companies for use of local networks to originate and terminate calls. Traditionally, these charges exceeded the cost of local companies providing access to long distance companies, and the excess revenue allowed local dial tone rates to be lower. Verizon's access charges have declined significantly so that this is much less true than it used to be. However, for independent telephone companies, higher-priced access charges still represent a more significant revenue stream.
- Rate averaging: Regulators traditionally have set rates for urban and rural customers at similar if not identical levels. For customers of large companies that serve both kinds of customers, the effect of rate averaging is that rural rates are kept lower and urban rates higher than they might otherwise have been.
- Other rate design tools: Charging by the minute for local calls and having small local calling areas are techniques that regulators have used to keep down the price of the most basic level of service, especially when that rate would otherwise be a high one.

Table 5.2:
Lifeline subscribers and Federal dollars 1995-2002

	Vermont Subscribers	Federal Dollars to Vermont
1995	25,624	$1,094,178
1996	24,791	$1,039,649
1997	25,356	$1,064,932
1998	26,475	$2,214,987
1999	28,464	$2,403,381
2000	29,740	$2,646,801
2001	30,235	$2,902,466
2002	29,621	$3,193,140

Source: FCC, Trends in Telephone Service, August 2003.

FEDERAL UNIVERSAL SERVICE SUPPORT

The Telecommunications Act of 1996 for the first time in federal statutes codified several important universal service goals as national statutory objectives (see sidebar, "Federal Universal Service Goals") and required the Federal Communications Commission (FCC) to provide sufficient support to achieve those goals. The most important goal for Vermont relates to reasonably comparable rates in rural areas: "access to telecommunications and information services, including…advanced telecommunications… services that are reasonably comparable to those services provided in urban areas and that are available at rates that are reasonably comparable to rates charged for similar services in urban areas."

While the FCC has taken steps to implement this section, the results to date are less than completely satisfactory for Vermont. The FCC addresses the universal service task under two systems. One system applies to what the FCC calls "rural telephone companies." In Vermont there are nine independent telephone companies in this group. The second system applies to so-called "nonrural" companies; in Vermont this means Verizon-Vermont. Funding for larger so-called "nonrural" companies is far less generous, largely because the FCC assumes that each such company has large low-cost urban areas that can contribute to costs in high-cost rural areas in the same state. Unlike many states, Vermont has no large metropolitan area, and it is harder-pressed to support rural areas with internal contributions.

The FCC has used a formula to determine high cost support for large companies. That formula was challenged by Vermont and a number of other rural states. The federal appeals court reversed the FCC and remanded the issue for further consideration. The FCC has revised its formula. Its method still has two flaws for Vermont. One, the formula compares the cost of serving rural areas like Verizon's rural Vermont service areas to national average costs, not to urban average costs, which are lower and which are mentioned in the law. Second, it fails even to provide

Federal Universal Service Goals
Sec. 254 of the 1996 Telecommunications Act

(1) QUALITY AND RATES.--Quality services should be available at just, reasonable, and affordable rates.

(2) ACCESS TO ADVANCED SERVICES.--Access to advanced telecommunications and information services should be provided in all regions of the Nation.

(3) ACCESS IN RURAL AND HIGH COST AREAS.--Consumers in all regions of the Nation, including low-income consumers and those in rural, insular, and high cost areas, should have access to telecommunications and information services, including interexchange services and advanced telecommunications and information services, that are reasonably comparable to those services provided in urban areas and that are available at rates that are reasonably comparable to rates charged for similar services in urban areas.

(4) EQUITABLE AND NONDISCRIMINATORY CONTRIBUTIONS.--All providers of telecommunications services should make an equitable and nondiscriminatory contribution to the preservation and advancement of universal service.

(5) SPECIFIC AND PREDICTABLE SUPPORT MECHANISMS.--There should be specific, predictable and sufficient Federal and State mechanisms to preserve and advance universal service.

(6) ACCESS TO ADVANCED TELECOMMUNICATIONS SERVICES FOR SCHOOLS, HEALTH CARE, AND LIBRARIES.--Elementary and secondary schools and classrooms, health care providers, and libraries should have access to advanced telecommunications services…

(7) ADDITIONAL PRINCIPLES.--Such other principles as…are necessary and appropriate for the protection of the public interest, convenience, and necessity and are consistent with this Act.

support for any rural costs that are less than two standard deviations above the national average cost.

Federal action other than that dealing with the Universal Service Fund could also have an impact on universal service by impacting the affordability of telephone service. The FCC has had a long-pending Notice of Proposed Rulemaking that considers eliminating access charges, the payments that long distance companies make to local companies. (See the subsection on "Federal Preemption" in Section 1, "Telecommunications Trends.") Many conceptual proposals for replacing the lost revenue from access charges involve increases in subscribers' recurring monthly charges. Rural independent telephone companies in particular get a significant proportion of their revenue from access charges, and the necessary increases in subscriber charges could be especially large for the customers of these companies unless there was an increase in some other form of support such as federal universal service support.

In theory, federal action to promote universal service might also extend to broadband services. Section 706 of the Telecommunications Act states that the FCC "shall…regularly…determine whether advanced telecommunications capability is being deployed to all Americans in a reasonable and timely fashion." The section continues, "If the Commission's determination is negative, it shall take immediate action to accelerate deployment of such capability by removing barriers to infrastructure investment and by promoting competition in the telecommunications market." To date, the FCC has not made a negative determination. In summary, while Vermont might have expected greater assistance from federal policy in meeting goals of affordability and deployment of broadband services, that help has been limited and may continue to be so.

Strategies/Action Plans

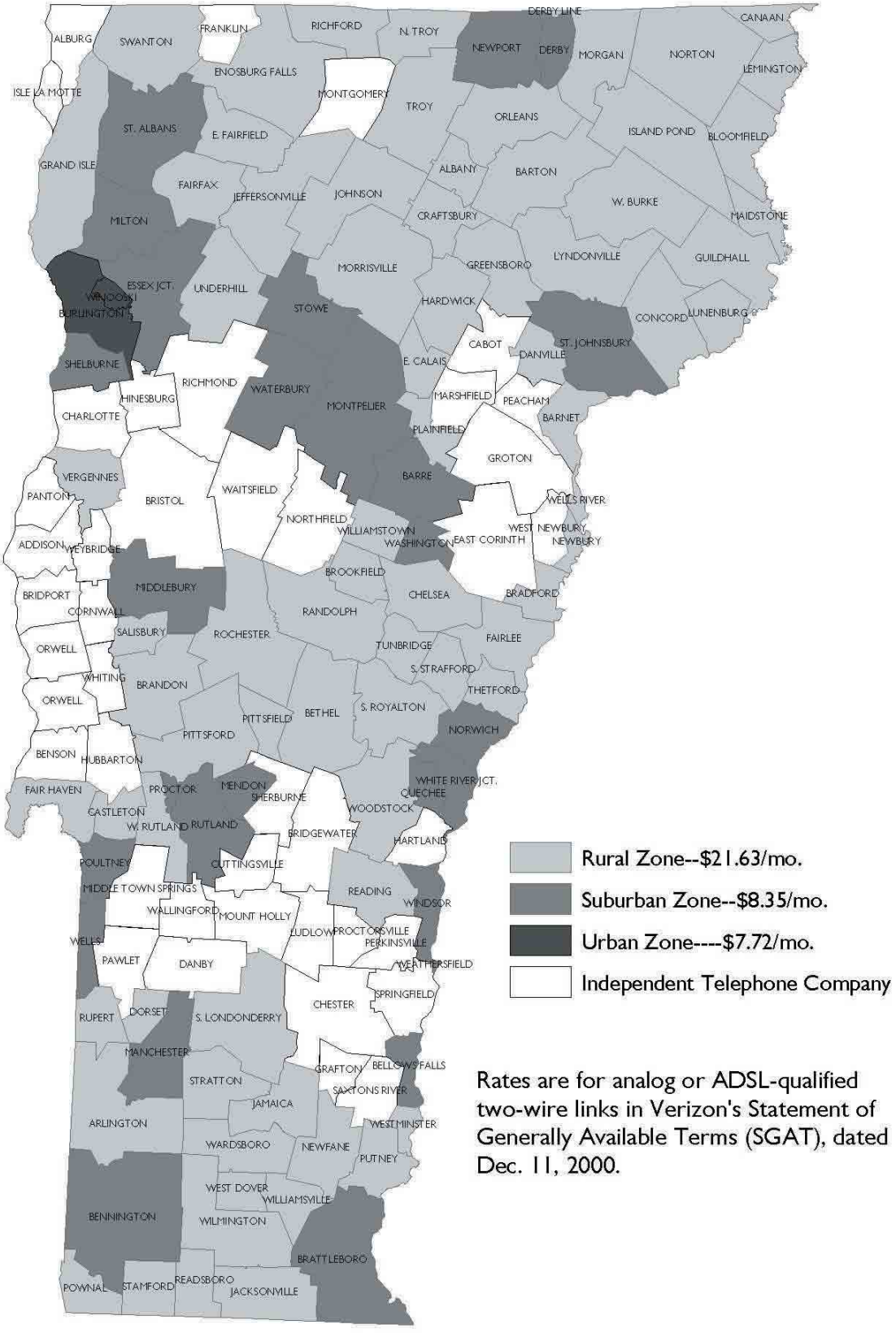
- The Public Service Board (PSB), Public Service Department (PSD), and Vermont's federal lawmakers should all advocate for Federal policies and programs that support universal telephone service in rural Vermont as well as measures that ensure that advanced telecommunications services are universally available to Vermonters.

STATE UNIVERSAL SERVICE SUPPORT FOR HIGH-COST AREAS

In the past, Vermont has helped to offset the higher cost of providing telephone service in sparsely populated areas by setting rates that were similar in rural and more urbanized parts of the state (so-called "rate averaging") and by allowing rates charged to long distance companies by local service providers to bear a disproportionate share of the cost of the network, relative to the rates charged to local customers. These techniques have been important parts of maintaining universal service, and both are under pressure by competition and technology change. Vermont can continue to fund universal service by changing the ways it supports universal service. At the same time, it is a good time to re-examine what are the essential basic telecommunications services. While Vermont should re-tool the way it funds universal service in high-cost areas, it is important to realize that this is an update of longstanding public policy, not brand new policy.

In the past, regulators had greater power to manipulate rates to achieve public

Figure 5.1:
Verizon deaveraged wholesale loop rates



policy goals, and a prime goal was low-priced dial tone. However, competition is now the favored means of restraining prices (as well as meeting a variety of other policy goals), and this requires progressively giving carriers more power to set their own prices without close oversight. Competition for local dial tone service has come to business markets and more recently to residential markets. In a marketplace that increasingly relies on competition over regulation to restrain prices, it is important to reduce barriers to competition in low-density areas. However, a little-understood interaction between federal competition policy and universal service policy limits the spread of competition in rural markets. To provide service to customers Competitive Local Exchange Carriers (CLECs) often rely on Verizon facilities, especially the local loop (the last link between a telephone company central office and the customer's premises). CLECs lease these facilities at wholesale. By FCC order, the wholesale prices for these facilities must be "geographically deaveraged." In other words, the prices for areas that cost less to serve (typically high-density areas) must be priced less than high-cost areas to serve. The PSB has responded by dividing Verizon's exchanges into "urban," "suburban," and "rural" groups. (See Figure 5.1.) Wholesale unbundled loop rates for the rural exchanges are significantly higher than those for urban and suburban exchanges. In the meantime, Verizon's retail rates for local telephone service are averaged across its footprint, containing essentially an internal subsidy that allows rural dial tone to cost less. In fact, Verizon's retail price is less than the price of its wholesale rate for a local loop in a rural exchange. As a result there are few, if any, CLECs providing service in rural exchanges except to businesses that are prepared to spend more on a larger bundle of services provisioned over the loop. This lack of competition for small customers appears unlikely to change except where the competing service is provided over the competitor's own facilities, such as in the case of a cable or wireless company—and these facilities are more expensive to deploy in rural areas as well. One response could be to deaverage Verizon's retail dial tone rate as well. The result could be very high prices for telephone service in rural exchanges, hardly a result supporting universal service. The other alternative is to create a mechanism that mimics in a competitive market that which happens internally in Verizon's averaged retail rate—rural areas receive extra cost support. A state high-cost fund is the mechanism to achieve this. The original legislation creating the Vermont Universal Service Fund in 1993 contemplated a high-cost area component of the fund coming into being upon further legislative action. That action never materialized. Today, a high cost area fund should reflect the developments of technology since 1993.

Present Definitions for Basic Service

The current set of basic services, as defined by the statute establishing eligibility for Vermont Universal Service Fund (USF) support, includes switched voice-grade service, the ability to transmit switching instructions through tones in customer-owned equipment, the ability to transmit and receive computer-generated data, reliably and at common transmission rates using customer-owned equipment, and the ability to reach emergency services and telecom relay services (30 V.S.A. § 7501(b)(1)(A)-(E)).

In its Order in Docket 5713 - Phase I, the Public Service Board concluded:

> Basic service . . . should consist of 1) single party service, 2) continuous emergency access and 3) the availability of extended area service. Bell Atlantic eliminated multi-party service in early 1999. Single party service itself should be made up of several components: switched voice grade communications, access to toll service, and relay service as appropriate. In addition, installation and repair services, white pages (or equivalent) and directory assistance should also be elements of the basic service package. . . basic service must [also] include certain minimum service quality, consumer protection, and privacy assurances. (PSB Order, Docket 5713 Phase I, 5/29/96, 65.)

Universal service policy has concerned itself most prominently with supporting affordable access to basic service. "Basic service" has traditionally meant voice telephone services and a collection of voice service enhancements such as E 9-1-1 and touch tone. We now see that an overwhelming majority of Vermonters are Internet users and every day it is a more indispensable business tool. According to the PSD's periodic surveys in 1999, 5% of all Vermont businesses and other non-residential organizations made business-to-business transactions over the Internet. In 2003, that figure was 43%. It would be wrong, however, to think that Vermont businesses will be able to compete while conducting business on-line over dial-up connections. Packet data services and Internet access have not yet reached the level of importance that voice telephony currently occupies. Therefore, in a present-time sense these do not yet qualify as "basic service." Yet it would be wrong to minimize their importance. The telecommunications network of tomorrow (and to a significant extent, today) is a packet data network. This does not mean voice is going away. The voice service of tomorrow will, in all likelihood, be an application on a packet data network based on Internet Protocol or some successor. It will work as well if not better than the voice service we know today. Tomorrow, the essential service for homes and businesses will not be a voice telephone line on which we sometimes send data via modem. It will be a data telecommunications service over which users send voice, as well as many, many more applications. This is already coming to pass. Internet access has already grown to become fundamentally embedded in business and work, education, government, and social interaction. Therefore, it is time to treat packet data service as the emerging basic service.

In 1999, 5% of Vermont businesses and other non-residential organizations made business-to-business transactions over the Internet. In 2003, that figure was 43%.

State and federal universal service funds do not currently address broadband. Federal universal service policy may eventually do so through the section 706 process, but Vermont cannot afford to wait for possible future FCC action. Moreover, a state high-cost fund can address other issues as well. It can address the lack of rural access to telephone service choice and support the deployment of rural broadband by focusing on the basic element that underlies them both—the last mile link. It can also provide a mechanism for reducing rural independent telephone companies' reliance on above cost access charges to support affordable dial tone rates. (For more on this last issue, see the subsection on "Rates" in Section 8, "Vermont Telecom Regulatory Policy.")

Policies

- By the year 2007, at least 90% of Vermont's homes and businesses should have broadband Internet access at prices comparable to those available in the commercial centers of the state.
- While packet data services may not qualify as "basic service," under pre-existing universal service programs intended to support affordable voice service, they should be regarded as emerging basic services.
- Whenever possible, support for basic voice telephony service should not be structured in such a way as to preclude its use for "dual use" networks—packet data networks that can support carrier-grade voice telephony.
- The benefits of opening the Vermont telecommunications market to more competition should flow to all consumers. Imposing barriers or constraints on competitive services to preserve universal service is likely to provide

only temporary relief, hamper efficiency, and delay services that would benefit the basic service customer.

Strategies/Action Plans

- ▶ The legislature should authorize a new fund to support rural telephone and broadband links capable of supporting telephone service in areas with a high cost to provide service.
  - Service providers should receive from the fund a credit for each access line or line equivalent served in rural zones defined from time to time by the PSB.
  - To provide revenue for the fund, the PSB should be authorized to impose a charge on each access line or line equivalent across all service providers. Lines or line equivalents eligible to receive support should be exempt from paying the charge.
  - Charges should be imposed on and credits given to providers offering retail service, not to retail customers, so as not to increase the complexity of customer bills.
  - Charges and credits should apply to both voice and data lines or line equivalents. The PSB should be authorized to establish and adjust a level of data "basic service" for the purposes of calculating cost requirements.

THE EXISTING STATE USF CHARGE

The Vermont Universal Service Fund (USF) has been operating since 1994. How the state will sustain a stable and viable base of contributions to this fund in the face of changes in how communications services are regulated is an emerging issue. The Vermont USF charge today applies to all telecommunications services provided to a Vermont address. Telecommunications services are defined generally as "transmission of any interactive electromagnetic communications that passes through the public switched network."[2] The statute provides examples of services that are included and services that are excluded.

The charge is collected by "telecommunications service providers," defined as any:

> ...company required by law to hold a certificate of public good from the public service board to offer telecommunications service for intrastate service, or is authorized by the Federal Communications Commission to offer interstate telecommunications service.[3]

A telecommunications service provider must impose the charge on its customers' bills for telecommunications services, must collect customer payments, and must remit those payments to the state's fiscal agent. The rate is set annually by the PSB and varies from year to year depending on the expenses of the programs it supports. Under law it cannot exceed 2.0%.

Unfortunately, these definitions differ slightly from the definitions used to establish which companies are subject to the jurisdiction of the PSB, and they are becoming more difficult to interpret in light of new services. Voice and data services are converging with the

Table 5.3:
VT USF fiscal year 2004 budget

E-911	$3,241,031
Lifeline	$1,468,355
Telecommunications Relay	$436,002
Relay "Adaptive Equipment"	$75,000
Administrative	$163,000
Total	**$5,383,388**

growth in Voice over IP (VoIP) services. Broadband services used for Internet access have not been subject to the charge, but now there are "broadband phone companies." The PSB has not formally addressed whether various cable, telephone, and wireless broadband services that combine Internet access with a communications facility should be subject to Vermont USF surcharges. To sustain the programs funded by the Vermont USF, state policy must provide for a stable base on which it can impose the charge. If consumers migrate their spending to services on which the charge is not imposed, then the goals of the program will suffer without some other funding source. At the same time, equitable treatment of similar services is desirable, and the fund should not be applied unnecessarily to new services.

Policies

- Functionally similar services should or should not contribute equally to the Vermont USF regardless of the technology used to deliver the services.
- The universal service charge that funds voice-related programs like E 9-1-1 and relay should be levied on services sold to Vermonters that provide voice capability and that rely at least in part on the Public Switched Telephone Network (PSTN) and that use telephone numbers.
- The question of whether or not a service provider is obligated to collect for the Vermont USF should not necessarily be linked to the question of whether the service provider is regulated by the PSB. In other words, it may be desirable that some voice-related services contribute even if they are not regulated; it may be desirable to have some regulated services that do not contribute; and it should not automatically follow that a contributing service should be regulated.

Strategies/Action Plans

- The legislature should clarify the definition of "telecommunications services" contained in Chapter 88 of Title 30 in line with the policies presented above.

TELECOMMUNICATIONS TAXATION

Unfortunately, over the years, telecommunications and cable services have become the subject of an increasing level of taxation. Act 60 introduced a sales tax of 4.36% on telecommunications services. Act 68 of the 2003 session increased this tax (along with all other sales taxes) to 6%. Sales and use tax also applies to purchases companies make on equipment to be installed in Vermont. As the level of taxation for non-telecommunications purposes on telecommunications rises, not only do Vermonters pay more for an essential service, there is also more resistance to charges that actually contribute to universal telecommunications access.

On the property tax side, differences exist in how the personal property of telephone and cable companies (like their outside plant) are taxed. Cable companies' property is taxed with a conventional property tax while that of telephone companies is the subject of a special, statewide alternative tax. These taxes have different tax rates and different methods of establishing property value. These

differences are discussed in greater detail in a 2000 report by the Departments of Taxes and Public Service entitled, *Broadband Deployment and Taxation in Vermont*. Trends in technology indicate that this differing tax regime will become increasingly unworkable over time. In particular, it is likely that cable companies will sooner or later introduce telephone services in Vermont. These services will use the same infrastructure as cable television, thereby placing the proper classification of this infrastructure in doubt. Furthermore, cable and telephone companies are already both selling functionally similar broadband services (cable modem and DSL services) to Vermonters.

Policies

- Infrastructure used for providing telecommunications over cable, telephone or wireless should receive similar property tax treatment.
- Telecommunications services should not be the subject of new special taxes to fund non-telecommunications purposes.

Strategies/Action Plans

- When opportunities arise to reduce taxes on telecommunications, highest priority should be given to taxes on investment in new infrastructure, especially infrastructure for high-speed data services and mobile services, followed by consumption taxes imposed on telecommunications services.
- The legislature should proactively move property taxation of cable companies and telephone companies to a single system.

DISABLITY ACCESS

The mass migration of communications to data networks is in some ways converging the communications of the hearing- and speech-impaired and the rest of the community. While many disabled Vermonters have relied for years on a long-standing form of "instant messaging"—the TTY or text telephone—it now seems that the rest of the world has discovered instant messaging on the Internet and on mobile phones. Computers can now function as TTY's and any computer with an Internet connection can now provide relay service without long distance charges through Internet Relay. Users type their conversation on a web page and the communications assistant calls the desired party on the telephone. Furthermore, as videoconferencing moves to the desktop the implications for the deaf and hearing impaired can be profound. For many of these individuals, written and spoken English is a second language and using a TTY is the rough equivalent of a hearing English speaker using the telephone—but having to do so in Greek. American Sign Language (ASL) is a language that cannot be typed or heard, but requires a visual medium, a visual that video conferencing provides. Despite these developments, one should not exaggerate the extent to which barriers to access have come down. Neither text messaging nor videoconferencing yet have the universal adoption of the telephone, and therefore cannot yet completely replace services that adapt the telephone to the needs of disabled people. Relay services act as a vital bridge.

About 3,000 Vermonters are deaf, and approximately 20,000 more are hard-of-hearing.

Vermont, as well as all other states, provides access to a relay service (see "What is Relay Service" below) that links conventional telephones and TTYs. A rela-

tively new service, video relay service, allows users with a broadband Internet connection and a connected video camera to communicate in sign language to a communications assistant, who acts as the bridge to a telephone user. While states and the federal government share the costs of relay service along an intrastate/interstate split, the costs of video relay have in the past been paid entirely through the FCC on an interim basis. There is a significant likelihood that the FCC will implement a means of identifying where the video users are "calling" from and revert to splitting these costs with states. This represents potentially very high costs for the state. The rate Vermont has paid in the past for traditional relay service is less than $2.00 per minute, as part of a total relay program cost of less than half a million dollars per year. In 2003, the FCC set its reimbursement rate for video relay service at $7.75/minute. Clearly, the state cannot support video relay under the current funding mechanism and levels for the state universal service fund.

For the visually impaired, the increasing amount of content available on the World Wide Web can produce frustration, if that information is not made accessible. Vermont state government should do its part by assuring that state web sites do not throw up barriers.

Policies

- Vermont should make a priority support of technologies that allow hearing and speech-disabled Vermonters to communicate in familiar modes including ASL. Video Relay is a current example of such a technology.
- Vermont should continue to support the use of broadband services to deliver voice-to-text services. Internet relay is a current example of such a technology.

What is Relay Service?

The Vermont Telecommunications Relay Service (VTRS) is a telephone service that the Americans With Disabilities Act requires every state to provide. Through the service, specially trained communications assistants relay messages between hard-of-hearing, speech disabled, or deaf people who use text telephones and related equipment, and people who communicate via regular telephone. To communicate, a hard-of-hearing, speech disabled or deaf person uses a text telephone (TTY)—a telephone with a keyboard and a small screen—to type his or her part of the conversation. The communications assistant simultaneously receives and reads the messages to the hearing person at the other end of the line. The communications assistant then types back the hearing person's spoken words to the TTY user. The service also includes "speech-to-speech" relay in which a communications assistant, trained to understand people with speech disabilities, repeats the speech-disabled person's conversation to the other party. Speech-to-speech is a new feature and is presently underutilized due to lack of public awareness.

Users reach the relay service by dialing 7-1-1 or one of several toll-free numbers. The service is provided at no cost to the caller or the called party, and long distance charges are billed as if the caller had placed the call directly to the called party without the communications assistant as intermediary. The service has greatly enhanced the ability of deaf, hard-of-hearing and speech disabled persons to communicate with friends, family, business associates, doctors and others with whom contact is essential to full participation in society. For more information, visit http://www.vermontrelay.com.

- State government Web sites should provide appropriately accessible communications for all users.

Strategies/Action Plans

- Assistance programs for the deaf, hard-of-hearing, and speech impaired should continue to provide assistance for devices usable with broadband telecommunications.
- If the FCC ceases to fund video relay, the legislature must review and explicitly decide whether the state will fund the full cost of video relay and designate a new or expanded funding mechanism for it.
- Vermont Emergency Management officials should incorporate new modes of communication such as wireless text messaging into emergency alert systems.
- The E 9-1-1 Board should continue to work with national standard-setting groups to identify standards for the use of text messaging devices for emergency communication.

(Endnotes)

[1] Federal Communications Commission (2002). Trends in Telephone Service, p. 17-4. Telephone penetration rate are as of July 2001.

[2] 30 V.S.A. § 7502(b)(5)

[3] 30 V.S.A. § 7502(b)(6)